Math 1021 Weekly Topics
Fall 2024

Note: Section numbers are listed before each topic below. The letters in parentheses are the objectives that will be taught in that section. If no objectives are listed, then all objectives are to be taught for that section.

Week	Content
1 *8/26-8/30*	**2.2** Functions and Graphs **(abd)** **2.3** Finding Domain and Range (Use graph to find range) **3.2 & 3.3** Solving Systems of Equations In Two Variables (Substitution and Elimination) ***Review Quiz:*** **Wednesday, August 28 / Thursday, August 29**
2 *9/2-9/6*	**4.2** Multiplication of Polynomials **5.3** Division of Polynomials (Use long division, no synthetic division)
3 *9/9-9/13*	**4.7** Factoring: A General Strategy (Notes provided as a supplement) **(Ex 1, 2, 3, 6, 7)** **5.1** Rational Expressions and Functions: Multiplying, Dividing, and Simplifying
4 *9/16-9/20*	**5.2** LCMs, LCDs, Addition, and Subtraction **5.4** Complex Rational Expressions
5 *9/23-9/27*	**Review for Test 1** ***Test 1:*** **Wednesday, September 25 / Thursday, September 26** ***Includes sections 2.2, 2.3, 3.2, 3.3, 4.2, 5.3, 4.7, 5.1, 5.2 and 5.4***
6 *9/30-10/4*	**5.5** Solving Rational Equations **5.6** Applications **(Ex 5, supplemental problems)** **6.1** Radical Expressions and Functions
7 *10/7-10/11*	**6.2** Rational Numbers as Exponents **6.3** Simplifying Radical Expressions

8 *10/14-10/18*	**6.4** Addition, Subtraction, and More Multiplication **6.5** More on Division of Radical Expressions
9 *10/21-10/25*	**Review for Test 2** ***Test 2:*** **Wednesday, October 23 / Thusday, October 24** ***Includes sections 5.5, 6.1 - 6.5***
10 *10/28-11/1*	**6.6** Solving Radical Equations **(a excluding Ex 5)** **6.7** Applications Involving Powers and Roots **(Ex 2, 3, 4)** **6.8** Increasing, Decreasing, and Piecewise Functions **(a,b)** (increasing, decreasing, and constant functions; relative maximum and minimum from graphs)
11 *11/4-11/8*	**7.4** Quadratic Equations, Functions, Zeros, and Models **(Skip Ex 9, 10, 11)** **7.5** Analyzing Graphs of Quadratic Functions (Direction, Axis of Symmetry, Vertex, and Intercepts; Applications: projectile motion, **supplemental problems**)
12 *11/11-11/15*	**8.1** Polynomial Functions **(Skip Ex 6, 7; ignore multiplicity)** **8.5** Rational Functions (Find vertical and horizontal asymptotes from graph and algebraically; **skip applications**)
13 *11/18-11/22*	**Review for Test 3** ***Test 3:*** **Tuesday, November 19 / Wednesday November 20** ***Includes sections 6.6, 6.7, 6.8, 7.4, 7.5, 8.1 and 8.5***
14 *12/2-12/6*	**8.6** Polynomial Inequalities and Rational Inequalities (Solve, Use Number Line, Interval Notation) **(Skip Ex 4, 6, 7)** **Also, solve**: $\frac{x^2-6x+5}{x+1}\geq 0, \frac{x^2-1}{x^2+5x+6}\leq 0, \frac{x^2}{x-2}>0$ **Review for the Final Exam**
15	***Cumulative Common Final Exam:*** **Wednesday, December 11, 3:30 pm**

12/9-12/13	**- 5:30 pm**. **BE AWARE THAT THE FINAL IS SCHEDULED AT A SPECIAL TIME OUTSIDE OF THE FINAL EXAM MATRIX. IT IS THE RESPONSIBILITY OF EACH STUDENT TO KNOW WHERE AND WHEN THEIR FINAL EXAM TAKES PLACE.**